

Work Order ID 121023

September-16-14 12:48:17 PM

121023

Page 1

Item ID: D4930-1 Accept ***N9000040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Bearpaw
 Start Date: 6/16/14 Start Qty: 8.00 ***8*** Cust Item ID:
 Required Date: 6/16/14 Req'd Qty: 8.00 ***8*** Customer:
 Reference:

Approvals: Process Plan: Date: Tooling: Date: Run Start ***NR1***
 QC: Date: SPC (Y/N): Date: Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	---------	--------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D4930	B

105 0.00
105
 Purchasing Memo 0.00
 Purchasing ISSUE PO 25836
 Cut Blank per D4930 file

CL 14/09/18 8

111 0.00
111
 Packaging Memo 0.00
 Packaging

Papaf 8

115 0.00
115
 QC Memo 0.00
 Quality Control

mt 24/10/22
8

Work Order ID 121023

September-16-14 12:48:17 PM

121023

Page 2

Item ID: D4930-1 Accept ***N900040100*** Setup Start ***NS1***
 Revision ID: Stop ***NS2***
 Item Name: Bearpaw
 Start Date: 6/16/14 Start Qty: 8.00 ***8*** Cust Item ID:
 Required Date: 6/16/14 Req'd Qty: 8.00 ***8*** Customer:
 Reference:

Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____ Run Start ***NR1***
 QC: _____ Date: _____ SPC (Y/N): _____ Date: _____ Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
120 *120* HAAS 1 HAAS CNC vertical machine #1	HAAS CNC VERTICAL MACHINING #1 Memo 1-Inspect material for defects or damage prior to machining 2-Machine as per Folio FB217 and Dwg FOLIO REV: <u>AA</u> DWG REV: <u>B</u> 3-Deburr	0.00 0.00				<u>8</u>			
130 *130* QC Quality Control	QC2- Inspect parts off machine FAI/FAIB Memo	0.00 0.00				<u>8</u>			

Handwritten signature and date 14/10/22

Handwritten signature and date 14/10/22

Work Order ID 121023

September-16-14 12:48:17 PM

121023

Page 3

Item ID: D4930-1

Accept

N900040100

Setup Start

NS1

Revision ID:

Stop

NS2

Item Name: Bearpaw

Start Date: 6/16/14

Start Qty: 8.00

8

Cust Item ID:

Required Date: 6/16/14

Req'd Qty: 8.00

8

Customer:

Reference:

Approvals:

Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start

NR1

QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

NR2Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp
DAS
37
9-89

140

QC8- Inspect parts - second check

0.00

140

QC

Memo

0.00

Quality Control

8 14/10-23

150

Identify as per dwg & Stock Location: _____

0.00

150

Packaging

Memo

0.00

Packaging

PAP 12/1/38

OCT 31 2014

DAS
37
9-89

160

QC21- Final Inspection - Work Order Release

0.00

160

QC

Memo

0.00

Quality Control

14/11/38

14-11-03

Picklist Print

June-16-14 1:16:28 PM

Page 1

Work Order ID: 121023

121023

Parent Item: D4930-1

D4930-1

Parent Item Name: Bearpaw

Start Date: 6/16/14

Required Date: 6/16/14

Start Qty: 8.00

Required Qty: 8.00

Comments: IPP REV:A NEW ISSUE 13-10-07 JLM VERIFIED BY:DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
MUHMWB10		Purchased	No				sf	702.3000		11			

MIJHMWB10

UHMW 1" Black - 48"x120" Tivar Mfg.#52480104

Cd 14/10/03

<u>Location</u>	<u>Loc Qty</u>	<u>Loc Code</u>
MAT	329	
m129293	329	
MAT018	373.3	
m128267	47	
m128668	326.3	

m130421 x11

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

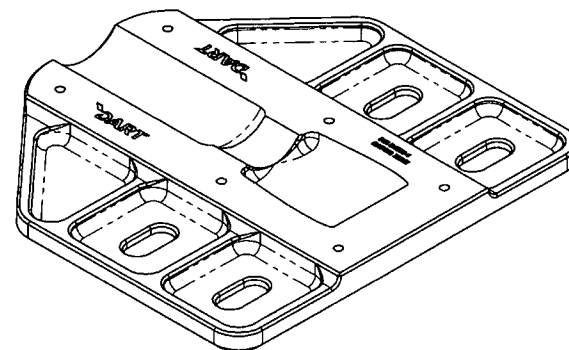
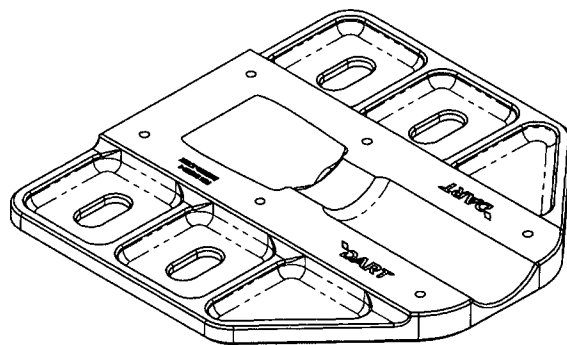
Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	AGAINST DEPARTMENT/PROCESS <table style="width: 100%;"> <tr> <td style="width: 25%;">Skid-tube <input type="checkbox"/></td> <td style="width: 25%;">Crosstube <input type="checkbox"/></td> <td style="width: 25%;">Water Jet <input type="checkbox"/></td> <td style="width: 25%;">Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design <input type="checkbox"/>									
Doc/Data <input type="checkbox"/>									
Equip/Tooling <input type="checkbox"/>									
Handling/Pre <input type="checkbox"/>									
Material <input type="checkbox"/>									
Operator <input type="checkbox"/>									
Offset/Setup <input type="checkbox"/>									
Process <input type="checkbox"/>									
Supplier <input type="checkbox"/>									
Training <input type="checkbox"/>									
Transport <input type="checkbox"/>									
Unapproved <input type="checkbox"/>									

FAULT CATEGORY

Landing Gear <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	General <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function	<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other
----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------



SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 121023 MJS

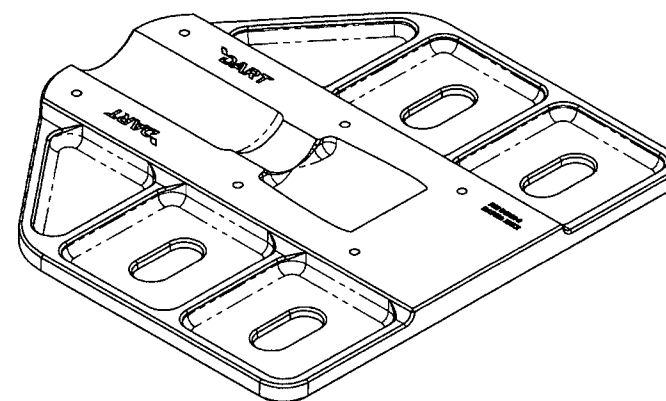
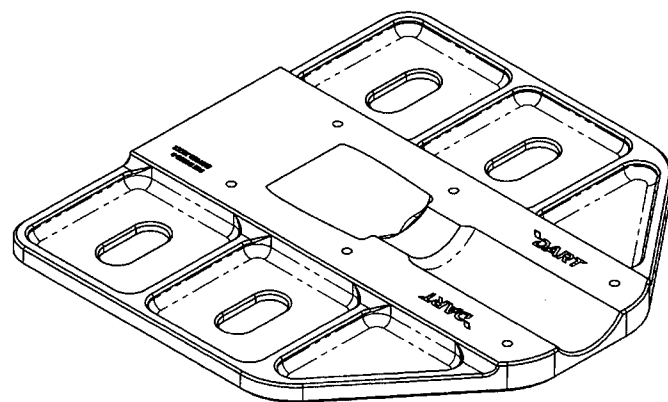
14-06-17

RELEASED
2013-12-12

D4930-1 BEARPAW

B	MOVE CLAMP HOLES 0.250" APART, ZN B2-3, B2-5, ADJUST TANGENT POINT, ZN C7-3, ADJUST RADIUS, ZN C5-3, B5-3, MOVE CLAMP HOLES AFT, ZN B1-3	VS	13.12.05
A	NEW ISSUE	VS	13.09.03
REV.	DESCRIPTION	BY	DATE
DESIGN	VS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	VS		
CHECKED	HS	DRAWING NO.	REV. B
MFG. APPR.	JLM	D4930	SHEET 1 OF 8
APPROVED	HS	TITLE	SCALE
DE APPR.	DS	BEARPAW	NTS
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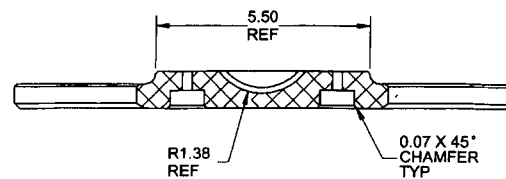
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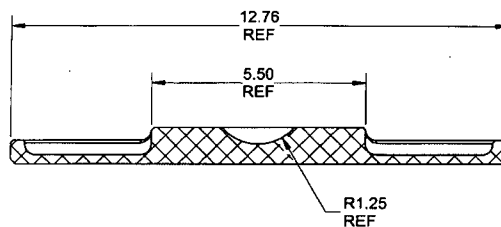
D4930-3 BEARPAW

RELEASED
2013-12-12
JND

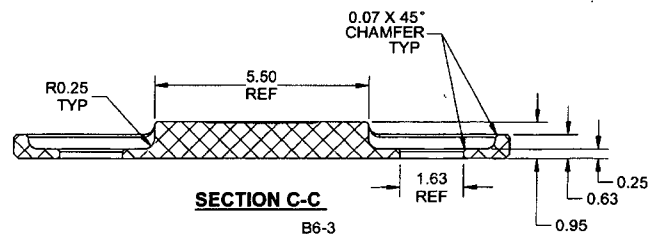
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	DRAWN	VS		
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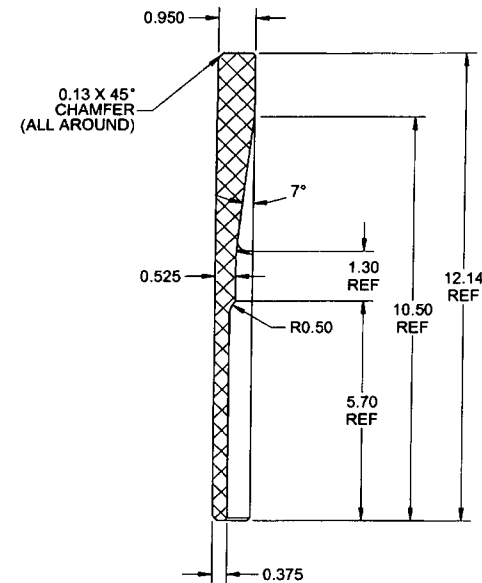
SECTION A-A
B6-3



SECTION B-B
C6-3



SECTION C-C
B6-3



SECTION D-D
C6-3

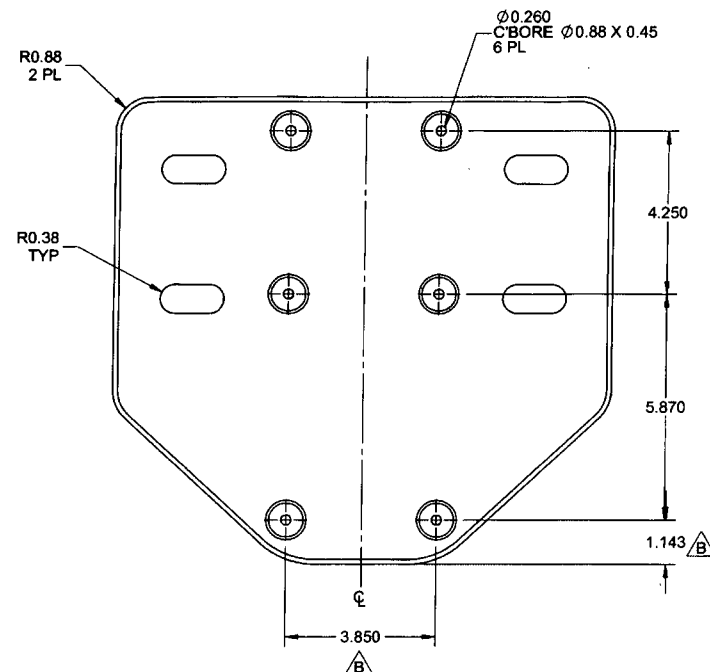
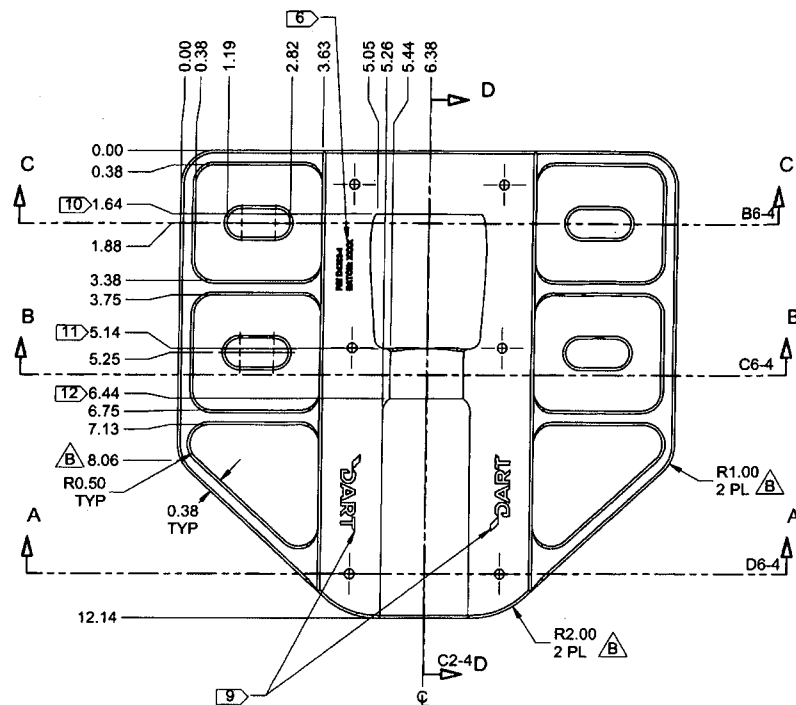
D4930-1 BEARPAW

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2013-12-12
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MFG. APPR.	JLM	SHEET 4 OF 6
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DATE	13.12.10	

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D4930-1 BEARPAW

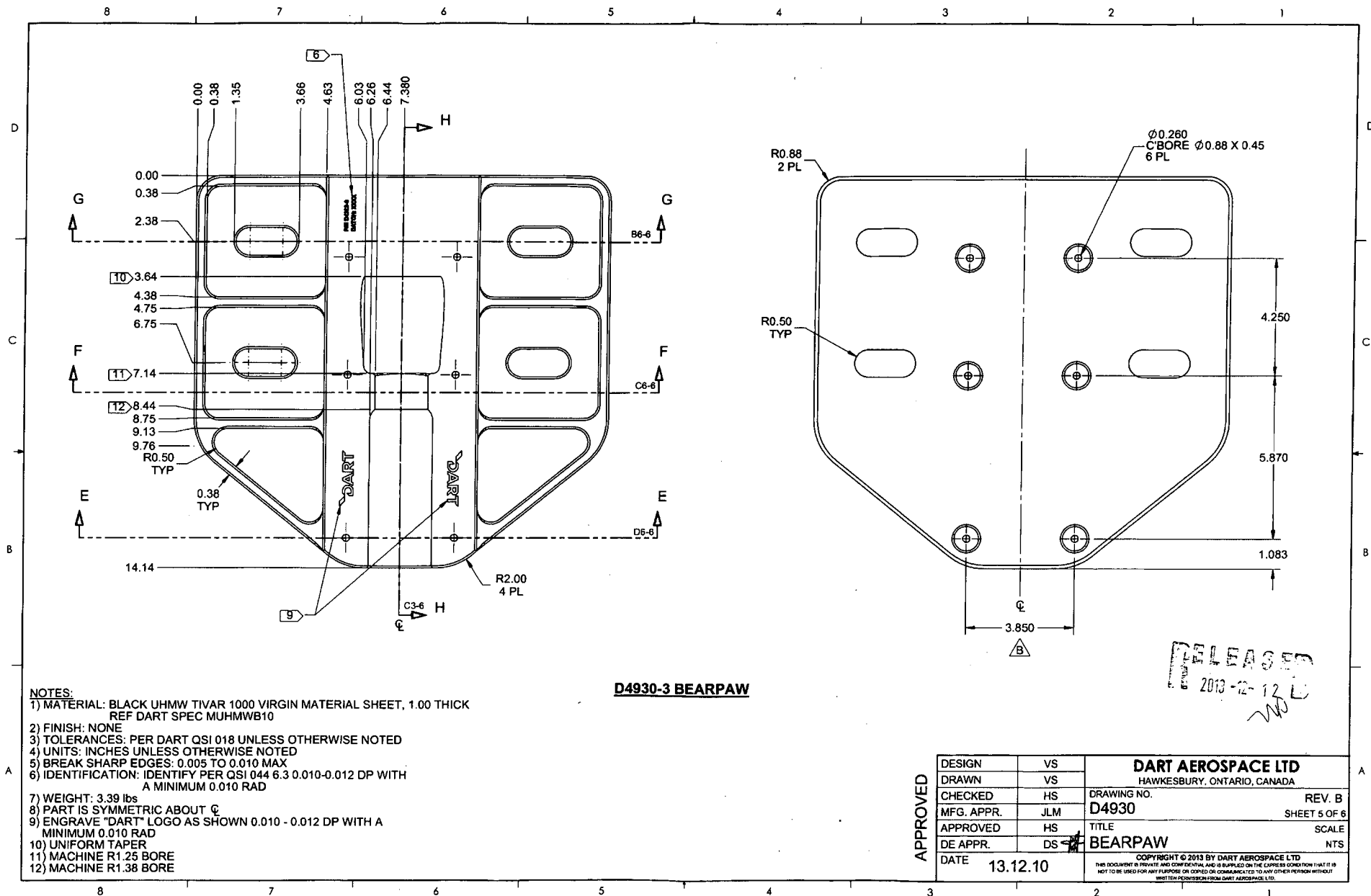
NOTES:

- 1) MATERIAL: BLACK UHMW TIVAR 1000 VIRGIN MATERIAL SHEET, 1.00 THICK
REF DART SPEC MUHMB10
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
- 6) IDENTIFICATION: IDENTIFY PER QSI 044 6.3 0.010-0.012 DP WITH
A MINIMUM 0.010 RAD
- 7) WEIGHT: 2.64 lbs
- 8) PART IS SYMMETRIC ABOUT C
- 9) ENGRAVE "DART" LOGO AS SHOWN 0.010 - 0.012 DP WITH A
MINIMUM 0.010 RAD
- 10) UNIFORM TAPER
- 11) MACHINE R1.25 BORE
- 12) MACHINE R1.38 BORE

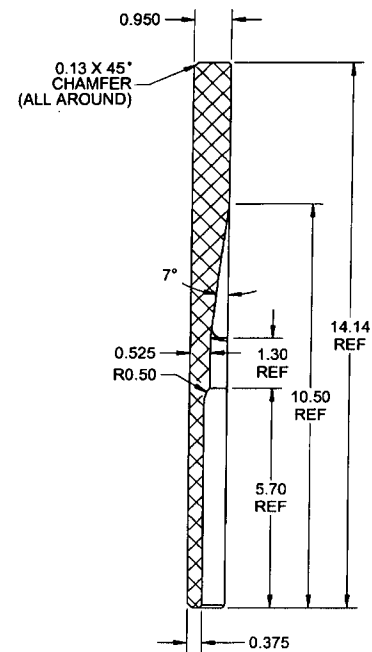
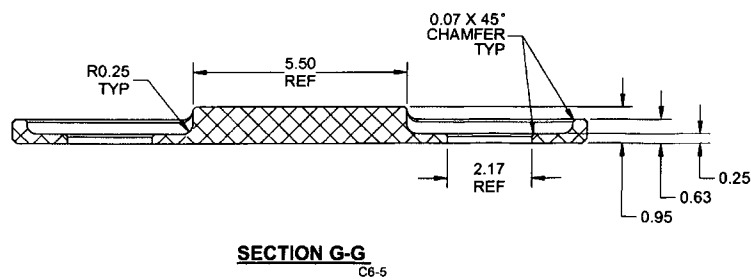
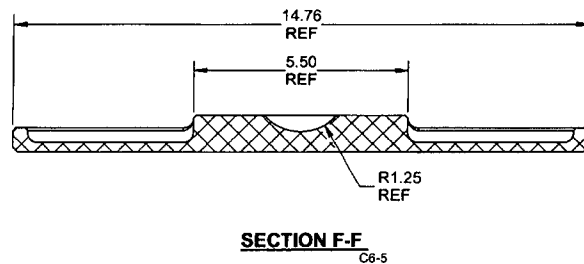
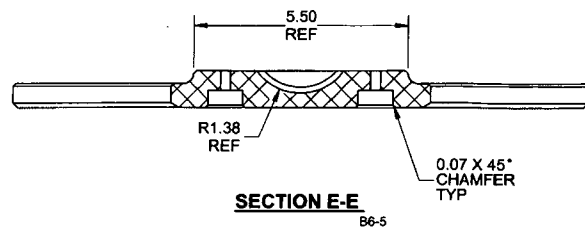
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2013-12-12

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DESIGN	VS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
DRAWN	VS		
CHECKED	HS	DRAWING NO. D4930	REV. B SHEET 3 OF 6
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DE APPR.	DS		
DATE	13.12.10		



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2013-12-12
W0



D4930-3 BEARPAW

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DESIGN	VS	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA
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CHECKED	HS	DRAWING NO. D4930
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DE APPR.	DS	BEARPAW
DATE	13.12.10	SCALE NTS

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DART AEROSPACE LTD		Work Order: 121023
Description: Bear Paw		Part Number:
Inspection Dwg: 4930-1 Rev: B		Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø.260	$\pm .001$ $\pm .006$.260	/		CNC -02	
Ø.88x.45	$\pm .030$.875x.470	/			
4.250	$\pm .010$	4.252	/			
5.870	$\pm .010$	5.868	/			
1.143	$\pm .010$	1.138	/			
3.850	$\pm .010$	3.853	/			
12.14	$\pm .030$	12.135	/			
.38	$\pm .030$.381	/			
1.88	$\pm .030$	1.874	/			
1.19	$\pm .030$	1.190	/			
2.82	$\pm .030$	2.810	/			
R.38	$\pm .030$	R.374	/			
5.50	$\pm .030$	5.501	/			
12.76	$\pm .030$	12.760	/			
1.63	$\pm .030$	1.620	/			
.25	$\pm .030$.253	/			
.63	$\pm .030$.631	/			
.95	$\pm .030$.950	/			
.375	$\pm .010$.381	/			
.525	$\pm .010$.532	/			
			/			

Measured by:		Audited by: DAS 37 9.89		Preliminary Approval:	
Date: 14/10/27		Date: 14.10.23		Date:	
Rev	Date	Change	Revised by	Approved	
E	10.04.14	Added preliminary approval	KJ		

10.04.15

T.P.I. INDUSTRIES INC.

148 GOODFELLOW
DELSON, QUÉBEC J5B 1V4
CANADA
Tel: (450) 633-0484
Fax: (450) 633-0879

Packing Slip

Packing Slip No.: 6316
Date: 2014-09-29
Page: 1

Sold to:	Ship to:
Dart Aerospace Michael Grégoire 1270 Aberdeen Hawkesbury, Ontario K6A 1K7 Canada	Dart Aerospace Michael Grégoire 1270 Aberdeen Hawkesbury, Ontario K6A 1K7 Canada
Order No.: 100810	Sold By: JONATHAN LESSARD
Shipped By:	Ship Date: 2014-09-29
Tracking No.:	

Item No.	Unit	Description	Quantity
d2432-3	Chaque	d2432-3 bearpaw	2
d2435	Chaque	d2435 bearpaw	18
d2521	Chaque	d2521 bearpaw	22
d2432	Chaque	d2432 bearpaw	15
d4930-1	Chaque	d4930-1 bearpaw	8
d4355-1	Chaque	d4355-1 bearpaw	7
d4353-041	Chaque	d4353-041 bearpaw	2
d4297-1	Chaque	d4297-1 bearpaw	2
d2995	Chaque	d2995 bearpaw	2
		po 25836	
Comment: Des frais d'intérêts de 2% / mois seront chargés sur tout compte passé du après 30 jours			